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Docket No.: GMI-059
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Janine Schuurman, *et al.*

Application No.: 10/714353 Confirmation No.: 6363

Filed: November 14, 2003 Art Unit: 1643

For: HUMAN MONOCLONAL ANTIBODIES AGAINST CD25 Examiner: Bristol, Lynn Anne

DECLARATION BY DR. Jan GJ van de Winkel UNDER 37 C.F.R. §1.132

MS Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

I, Dr. Jan GJ van de Winkel, declare the following:

1. I, Dr. Jan GJ van de Winkel, am presently the Chief Scientific Officer at Genmab A/S, the assignee of the above-referenced patent application. I am also Professor of Immunology at Utrecht University. My *curriculum vitae* is attached herewith as Appendix 1.

2. I have reviewed claims 22-24, 28-30, 32-34, and 36-38 of the above-referenced application, drawn to an isolated human monoclonal anti-human CD25 antibody comprising at least a particular heavy and light chain variable region CDR3 sequence (*e.g.*, SEQ ID NOs:25 and 28), including conservative sequence modifications thereof.

3. I understand that claims 22-24, 28-30, 32-34, and 36-38 of the above-referenced application have been rejected as not being enabled. Specifically, the Examiner asserts that the claimed antibodies, defined by at least particular heavy and light chain CDR3 sequences, are not enabled. The Examiner also asserts that the claimed antibodies are not enabled with respect to "conservative sequence modifications" within the recited CDR regions.

4. It is my opinion that, prior to the filing date of the present application, it was well within the skill of the art to predictably design and generate human anti-CD25 antibodies that share the same binding specificity, based on common CDR3 heavy and light chain variable region sequences (*e.g.*, human CD25-binding antibodies having a heavy chain CDR3 sequence as defined in the claims, but having differing CDR2 and CDR1 sequences). It is also my opinion that it was well within the skill of the art to have identified residues within the claimed variable and CDR regions that were amenable to conservative sequence substitutions (*i.e.*, residues that could be conservatively substituted without removing antibody binding). Indeed, the production of antibodies based on common CDR3 sequences, as well as the identification of residues within the CDR domains of such antibodies that are

amenable to conservative modifications, would have required only routine procedures, and particularly in view of the short length of these sequences, would not have involved undue experimentation. Indeed, the various methods and materials that were available, well before the filing date of the present application, are evidenced by the pre-filing references submitted with the Amendment and Response being filed along with this Declaration (discussed below).

5. In particular, the references summarized in Appendix A include a number of studies which have identified the heavy chain CDR3 region as being determinative of antigen-binding specificity. Moreover, it was found that the heavy chain CDR3 sequence alone can retain and confer antigen specificity when placed into a different antibody framework (*i.e.*, along with different CDR2 and CDR1 sequences). This is evidenced, for example, by Klimka *et al.* (2000) British J. of Cancer 83(2):252-260; Beiboer *et al.* (2000) J. Mol. Biol. 296:833-849; Rader *et al.* (1998) PNAS USA 95:8910-8915; Barbas *et al.* (1994) 116 J. Am. Chem. Soc. 2161-2162; Barbas *et al.* (1995) 92 PNAS USA 2529-2533; and Ditzel *et al.* (1996) 157 J. of Immunol. 739-749 (Appendices B-G, respectively), as well as the other references summarized in Appendix A.

6. With respect to the Examiner's position that the presently claimed antibodies which include conservative sequence modifications within the CDRs are not enabled, I refer to the references summarized in Appendix I (and described in detail in the accompanying Amendment and Response, *e.g.*, Brummell *et al.*, (1993) Biochem. 32:1180-1187; Kobayashi *et al.*, (1999) Protein Eng. 12(10):879-884; and Burks *et al.* (1997) PNAS USA 94:412-417; attached as Appendices J, K, and L, respectively). These references demonstrate the high level of skill in the art that existed prior to the filing date of the present application, and the fact that it did not require undue burden to have identified residues within the CDR domains of an antibody which could be conservatively modified without removing antigen binding.

7. In conclusion, it is my opinion, as supported by the foregoing representative pre-filing publications, that the knowledge and skill in the art at the time the present application was filed, combined with the teachings contained in the present specification, would have enabled one skilled in the art to have made and used the currently claimed antibodies, defined at least by the claimed heavy and light chain CDR3 sequences, as well as conservative sequence modifications thereof, without undue experimentation.

8. I have been warned that willful false statements and the like so made are punishable by fine or imprisonment, or both, under §1001 of Title 18 or the United States Code, and that such willful and false statements may jeopardize the validity of the subject application or any patent resulting therefrom, and declare that all statements made of our own knowledge are true and that all statements made on information and belief are believed to be true.

By: _____ Date: 2-2-2007

Update: April 6, 2006

CURRICULUM VITAE

PERSONAL DATA

Name	:	Dr. Jan G.J. van de Winkel
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Date of birth	:	March 1, 1961
Place of birth	:	Venray, The Netherlands
Citizenship	:	Dutch
Marital status	:	Married, four children

EDUCATION AND PROFESSIONAL BACKGROUND

1973-1979	:	Secondary school (Gymnasium-ß) "Het Jerusalem", Venray, The Netherlands.
1979 - 1985	:	Biology study, University of Nijmegen, The Netherlands * Master of Science (M.Sc.) in Biology: april 1985 (*cum laude*) - Principal subject: Physiology, Department of Physiology - Subsidiary subjects: Immunology, Department of Nephrology and Biochemistry, Department of Biochemistry
1985 - 1988	:	Graduate work, Department of Nephrology, University Hospital Nijmegen. Research fellow of the Netherlands Organization for Scientific Research (NWO). * Doctoral degree (Ph.D.): October 7, 1988. - Thesis: *Human monocyte Fcγ receptors.*
1988 - 1989	:	Post-doctoral Fellow, Department of Experimental Immunology, Utrecht University, The Netherlands.
Jan - Dec 1990	:	Visiting Scientist, Department of Internal Medicine, Ohio State University, Columbus (OH), USA.
1990 - 1992	:	Assistant Professor, Department of Experimental Immunology, Utrecht University, The Netherlands.
1992 - 1996	:	Associate Professor, Department of Immunology, Utrecht University, The Netherlands.
1996 - present	:	Professor, Department of Immunology, Utrecht University, The Netherlands.
1996 - 2000	:	Scientific Director, Medarex Europe, Utrecht, The Netherlands.
1998 - 2000	:	Vice President, Medarex Europe, Utrecht, The Netherlands.
1999 - 2001	:	Chief Scientific Officer, Genmab A/S, Copenhagen, Denmark.
2001 - 2003	:	Senior Vice President & Chief Scientific Officer, Genmab A/S, Copenhagen, Denmark.
2003 - present	:	Executive Vice President & Chief Scientific Officer, Genmab A/S, Copenhagen, Denmark.

HONORS / AWARDS

1990 Recipient of a NATO Science-exchange Fellowship from the Netherlands Organization for Scientific Research.

1996 Recipient of the *Dolph O. Adams* Award from The Society for Leukocyte Biology for the *most cited paper over the past five years* for a 1991 review "Biology of human Immunoglobulin G Fc receptors" (ref. 26).

2000 Winner *Nalinaj Fernando Memorial Award* for the best research article into primary immunodeficiency. "The role of Fc gamma receptor polymorphisms and C3 in the immune defense against Neisseria meningitidis in complement-deficient individuals". December 2000, British Society for Immunology (ref. 154).

2000 *Van Loghem Laureate 2000,* Dutch Society for Immunology.

PROFESSIONAL SOCIETIES AND ACTIVITIES

- Member American Association of Immunologists, Dutch Society for Immunology.
- Member, Editorial board, Immunogenetics (1997 - 2002).
- Regular reviewer for Molecular and Cellular Biology, Immunology Today, Journal of Immunology, Blood, Immunology, Journal of Leukocyte Biology, Arthritis & Rheumatism, Journal of Immunological Methods, European Journal of Immunology, EMBO Journal, Leukemia, Molecular Immunology, Immunogenetics, Clinical & Experimental Immunology, Kidney International, Journal of Clinical Investigation, Nature.
- Regular grant reviewer for The Wellcome Trust, The National Science Foundation (USA), The Netherlands Organization for Scientific Research, The Arthritis & Rheumatism Council (U.K.), Nationaal Reumafonds, NWO-Technology Foundation STW.
- Secretary, Study section Inflammation (901-12), Netherlands Organization for Scientific Research (1993 - 1996).
- Chairman, Study section Inflammation (901-12), Netherlands Organization for Scientific Research (1996 - 1999).
- Treasurer, Educational Committee, Dutch Society for Immunology (1995 - 1998).
- Member, Educational Committee, Dutch Society for Immunology (1998 - 2002).
- Member, Scientific Advisory Board, IDM, Paris, France (1994 - 1997).
- Consultant, Medarex Inc., Princeton (New Jersey), USA (1993 - present).
- Member, Board of advisors, The Thai Network for Biomedical Research (1997).
- Organizer, Vth World Conference on Bispecific Antibodies, Volendam (June 25-28, 1997), The Netherlands.
- Organizer, Annual Scientific Masterclasses, Utrecht Institute for Infection & Immunity (1993 - 1998).
- Chairman, Award committee, "The Centeon Award for Innovative Breakthroughs in Immunology" (1997 - 2001).
- Member, Scientific Council, Netherlands Cancer Foundation (NKB/KWF; 1998 - 2001).
- Member, Board of Division "Genetics, Microbiology & Immunology", Netherlands Organization for Scientific Research (1998 - 2000).
- Member, Organizing Committee, VIth International Conference on Bispecific Antibodies, Pacific Grove, California, USA (July 28 - August 1, 1999).
- Member, Supervisory Board of Directors, Central animal laboratory, Utrecht University (1999 – 2001).
- Member, Scientific Advisory Board, Biotech Turnaround Fund (BTF), Haarlem, The Netherlands (2000-present)
- Member, Organizing Committee, VIIth International Antibody Conference on Targeted Cellular Cytotoxicity, Hartley Wintney, UK (July 2001).
- Member, Curatorium, chair in Opthalmology focussing on inernal eye infection, Utrecht University (2003 – present).
- Organizer, Workshop "Immune-intervention for cancer and inflammation", 38th Annual Scientific Meeting of the European Society for Clinical Investigation, Utrecht, The Netherlands (April 2004).
- Member, Scientific Advisory Board, Thuja Capital Healthcare Fund, Utrecht, The Netherlands (2006 – present).

GRADUATE STUDENTS

Supervised 30 graduate students

PUBLISHED PAPERS

Published more than 250 scientific papers. The following papers were published since 2003 :

1. Van de Winkel, J.G.J., and C.L. Anderson. CD32: Cluster report. In **Leucocyte Typing V** (S. Schlossman et al., Ed.), Oxford University Press, Oxford, 1995; 823-826.

2. Van den Herik-Oudijk, I.E., N.A.C. Westerdaal, M. de Haas, L. Kemper, P.J.A. Capel, A.E.G.Kr. von dem Borne, and J.G.J. van de Winkel. Binding Heterogeneity within the CD32 panel of monoclonal antibodies. In **Leucocyte Typing V** (S. Schlossman et al., Ed.), Oxford University Press, Oxford, 1995; 832-835.

3. Sanders, L.A.M., R.G. Feldman, M.M. Voorhorst-Ogink, M. de Haas, G.T. Rijkers, P.J.A. Capel, B.J.M. Zegers, and J.G.J. van de Winkel. Human IgG Fc receptor IIA (CD32) polymorphism and IgG2-mediated bacterial phagocytosis by neutrophils. **Infect. Immunity** 1995; 63: 73-81.

4. Haagen, I.-A., A.J.G. Geerars, M.R. Clark, and J.G.J. van de Winkel. Interaction of human monocyte Fcγ receptors with rat IgG2b: a new indicator for the FcγRIIa (R-H131) polymorphism. **J. Immunol.** 1995; 154: 1852-1860.

5. Van den Herik-Oudijk, I.E., P.J.A. Capel, T. van der Bruggen, and J.G.J. van de Winkel. Identification of signalling motifs within human FcγRIIa and FcγRIIb isoforms. **Blood** 1995; 85: 2202-2211.

6. Van de Winkel, J.G.J., A.P.M. de Wit, L.K. Ernst, P.J.A. Capel, and J.L. Ceuppens. Molecular basis for a familial defect in phagocyte expression of Fcγ receptor I (CD64). **J. Immunol.** 1995; 154: 2896-2903.

7. Cambier, J., M. Daeron, W. Fridman, J. Gergely, J.-P. Kinet, R. Klausner, R. Lynch, B. Malissen, I. Pecht, E. Reinherz, J. Ravetch, M. Reth, L. Samelson, M. Sandor, A. Schreiber, B. Seed, C. Terhorst, J. van de Winkel, and A. Weiss. New nomenclature for the Reth motif (or ARH1/TAM/ARAM/YXXL). **Immunol. Today** 1995; 16: 110.

8. Pfefferkorn, L.C., J.G.J. van de Winkel, and S.L. Swink. A novel role for IgG-Fc; transductional potentiation for human high affinity Fcγ receptor (FcγRI) signalling. **J. Biol. Chem.** 1995; 270: 8164-8171.

9. Kwack, K. J.S. Verbeek, J.G.J. van de Winkel, P.J.A. Capel, M. Nambu, M. Hagen, J.V. Weinstock, R.G. Lynch, and M. Sandor. Functional consequences of the interaction between T cell antigen receptors and FcγRs on T cells. **Immunol. Lett.** 1995; 44: 139-143.

10. De Wit, A.P.M., H.C. Morton, P.J.A. Capel, and J.G.J. van de Winkel. Structure of the gene for the human myeloid IgA Fc receptor (CD89). **J. Immunol.** 1995; 155: 1203-1209.

11. Bredius, R.G.M., B.H.F. Derkx, C.A.P. Fijen, R.S. Weening, J.G.J. van de Winkel, and T.A. Out. FcγRIIa (CD32) allotype R131 as a risk factor for fulminant meningococcal septic shock. In **Progress in Immune Deficiency V** (I. Caragol, T. Espanol, G. Fontan, and N. Matamoros, Eds.) Springer-Verlag Iberica, 1995: 191-194.

12. Sanders, E.A.M., B.J.M. Zegers, J.G.J. van de Winkel, G.T. Rijkers, and M.M. Voorhorst-Ogink. Fcγ receptor IIa (CD32) heterogeneity in patients with recurrent bacterial respiratory tract infections. In **Progress in Immune Deficiency V** (I. Caragol, T. Espanol, G. Fontan, and N. Matamoros, Eds.) Springer-Verlag Iberica, 1995: 195-196.

13. Heijnen, I.A.F.M., and J.G.J. van de Winkel. A human FcγRI/CD64 transgenic model for *in vivo* analysis of (bispecific) antibody therapeutics. **J. Hematother.** 1995; 4: 351-356.

14. Repp, R., T. Valerius, G. Wieland, W. Becker, H. Steininger, Y. Deo, M. Gramatzki, J.G.J. van de Winkel, N. Lang, and J.R. Kalden. Stimulated PMN in immunotherapy of breast cancer with a bispecific antibody to FcγRI and Her-2/ Neu (MDX210). **J. Hematother.** 1995; 4: 415-421.

15. Vossen, A.C.T.M., G.J.M. Tibbe, M.J. Kroos, J.G.J. van de Winkel, R. Benner, and H.F.J. Savelkoul. Fc receptor binding of anti-CD3 monoclonal antibodies is not essential for immunosuppression, but triggers cytokine-related side effects. **Eur. J. Immunol.** 1995; 25: 1492-1496.

16. Duits, A.J., H. Bootsma, R.H.W.M. Derksen, P.E. Spronk, L. Kater, C.G.M. Kallenberg, P.J.A. Capel, N.A.C. Westerdaal, G.Th. Spierenburg, F.H.J. Gmelig-Meyling, and J.G.J. van de Winkel. Skewed distribution of IgG Fc receptor IIa (CD32) polymorphism is associated with renal disease in SLE patients. **Arthritis Rheum.** 1995; 39: 1832-1836.

17. Van den Herik-Oudijk, I.E., M.W.H. Ter Bekke, M.J. Tempelman, P.J.A. Capel, and J.G.J. van de Winkel. Functional differences between two Fc receptor ITAM signalling motifs. **Blood** 1995; 86: 3302-3307.

18. Morton, H.C., I.E. van den Herik-Oudijk, P. Vossebeld, A. Snijders, A.J. Verhoeven, P.J.A. Capel, and J.G.J. van de Winkel. Functional association between the human myeloid IgA Fc receptor (CD89) and FcR γ chain: molecular basis for CD89/FcR γ chain association. **J. Biol. Chem.** 1995; 270: 29781-29787.

19. Kruger, M., L. Coorevits, A.P.M. de Wit, M. Casteels-Van Daele, J.G.J. van de Winkel, and J.L. Ceuppens. Granulocyte-macrophage colony-stimulating factor antagonizes the transforming growth factor-β-induced expression of FcγRIII (CD16) on human monocytes. **Immunology** 1996; 87: 162-167.

20. Heijnen, I.A.F.M., M.J. van Vugt, N.A. Fanger, R.F. Graziano, A.P.M. de Wit, F.M.A.Hofhuis, P.M. Guyre, P.J.A. Capel, J.S. Verbeek, and J.G.J. van de Winkel. Antigen targeting to myeloid-specific human FcγRI/CD64 triggers enhanced antibody responses in transgenic mice. **J. Clin. Invest.** 1996; 97: 331-338

21. Van de Winkel, J.G.J., and P.J.A. Capel [Editors]. **Human IgG Fc Receptors**, R.G. Landes Company, Austin, TX, USA, 1996.

22. Van den Herik-Oudijk, I.E., J.S. Verbeek, P.J.A. Capel, and J.G.J. van de Winkel. FcγR on mononuclear cells. In **Human IgG Fc receptors** (J.G.J. van de Winkel and P.J.A. Capel, Eds.). R.G. Landes Company, Austin, TX, USA, pp. 57-78, 1996.

23. Morton, H.C., A.E. Schiel, S.W.J. Janssen, and J.G.J. van de Winkel. Alternatively spliced forms of the human myeloid Fcα receptor (CD89) in neutrophils. **Immunogenetics** 1996; 43: 246-247.

24. Elsässer, D., T. Valerius, R. Repp, G.J. Weiner, Y. Deo, J.R. Kalden, J.G.J. van de Winkel, George T. Stevenson, M.J. Glennie, and M. Gramatzki. HLA class II as potential target antigen on malignant B cells for therapy with bispecific antibodies in combination with granulocyte colony-stimulating factor. **Blood** 1996; 87: 3803-3812.

25. Van Vugt, M.J., I.A.F.M. Heijnen, P.J.A. Capel, S.Y. Park, C. Ra, T. Saito, J.S. Verbeek, and J.G.J. van de Winkel. FcRγ chain is essential for both surface expression and function of human FcγRI (CD64) *in vivo*. **Blood** 1996; 87: 3593-3599.

26. Kumpel, B.M., J.G.J. van de Winkel, N.A.C. Westerdaal, A.G. Hadley, J.-M. Dugoujon, and A. Blancher. Antigen topography is critical for interaction of IgG2 anti-red cell antibodies with Fcγ receptors. **Brit. J. Haematol.** 1996; 94: 175-183.

27. Groenink, J. J. Spijker, I.E. van den Herik-Oudijk, L. Boeije, G. Rook, L. Aarden, R. Smeenk, J.G.J. van de Winkel, and M.F. van den Broek. On the interaction between agalactosyl-IgG and Fcγ receptors. **Eur. J. Immunol.** 1996; 26: 1404-1407.

28. Kruger, M., J.G.J. van de Winkel, A.P.M. de Wit, L. Coorevits, M. Casteels-Van Daele, and J.L. Ceuppens. Granulocyte-Macrophage Colony-Stimulating Factor rapidly downregulates CD14 expression on monocytes. **Immunology** 1996; 89: 89-95.

28. Morton, H.C., M. van Egmond, and J.G.J. van de Winkel. Structure and function of human IgA Fc receptors (FcαR). **Crit. Rev. Immunol.** 1996; 16: 423-440.

29. Hazenbos, W.L.W., J.E. Gessner, F.M.A. Hofhuis, H. Kuipers, D. Meyer, I.A.F.M. Heijnen, R.E. Schmidt, M. Sandor, P.J.A. Capel, M. Daeron, J.G.J. van de Winkel, and J.S. Verbeek. Impaired IgG-dependent Anaphylaxis and Arthus reaction in FcγRIII (CD16) deficient mice. **Immunity** 1996; 5: 181-188.

30. Llewellyn-Jones, C., P. Cole, D. Kumararatne, and J.G.J. van de Winkel. The role of cellular immune responses in chronic pulmonary disease. In **Issues in Infection; The interaction between lung defences and bacteria - time for a reappraisal** (R.A. Stockley and S.L. Hill, Eds.), Cambridge Medical Publications, Worthing, West Sussex, U.K., pp. 13-15, 1996.

31. Van Vugt, M.J., I.E. van den Herik-Oudijk, and J.G.J. van de Winkel. Binding of PE-Cy5 conjugates to the human high affinity receptor for IgG (CD64). **Blood** 1996; 88: 2358-2360.

32. Worth, R.G., L. Mayo-Bond, J.G.J. van de Winkel, R.F. Todd III, and H.R. Petty. CR3 (αMβ2; CD11b/CD18) restores IgG-dependent phagocytosis in transfectants expressing a phagocytosis-defective FcγRIIA (CD32) tail-minus mutant. **J. Immunol.** 1996; 157: 5660-5665.

33. Van Dongen, J.J.M., C.G. Figdor, J.G.J. van de Winkel, and J. Borst. Receptoren in **Medische Immunologie** (R. Benner, J.J.M. van Dongen, W. van Ewijk, and J.J. Haaijman, Eds.), Wetenschappelijke uitgeverij Bunge, Utrecht, 1996, pp. 126-170.

34. Nibbering, P.H., E. Broug-Holub, A.C. Bezemer, R. Jansen, J.G.J. van de Winkel, and M.F. Geertsma. Phagocytosis and intracellular killing of serum-opsonized staphylococcus aureus by mouse fibroblasts expressing human Fcγ receptor type IIa (CD32). **Front. in Biosci.** 1996; 1: a24-32.

35. Rascu, A., R. Repp, N.A.C. Westerdaal, J.R. Kalden, and J.G.J. van de Winkel. Clinical relevance of Fcγ receptor polymorphisms. **Ann. N.Y. Acad. Sci.** 1997; 815: 282-295.

36. Deo, Y.M., R.F. Graziano, R. Repp, and J.G.J. van de Winkel. Clinical significance of IgG Fc receptors and FcγR-directed immunotherapies. **Immunol. Today** 1997; 18: 127-135.

37. Stockmeyer, B., T. Valerius, R. Repp, I.A.F.M. Heijnen, H.J. Bühring, Y.M. Deo, J.R. Kalden, M. Gramatzki, and J.G.J. van de Winkel. Preclinical studies with FcγR bispecific antibodies and Granulocyte Colony-stimulating Factor-primed neutrophils as effector cells against HER-2/neu overexpressing breast cancer. **Cancer Res.** 1997; 57: 696-701.

38. Valerius, T., D. Elsässer, R. Repp, J.G.J. van de Winkel, M. Gramatzki, and M. Glennie. HlA class II antibodies recruit activated neutrophils for treatment of B cell malignancies. **Leukemia and Lymphoma** 1997; 26: 261-269.

39. Poole, A., J.M. Gibbins, M. Turner, M.J. van Vugt, J.G.J. van de Winkel, T. Saito, V.L.J. Tybulewicz, and S.P. Watson. The Fc receptor γ-chain and the tyrosine kinase Syk are essential for activation of mouse platelets by collagen. **EMBO J.** 1997; 16: 2333-2341.

40. Heijnen, I.A.F.M., and J.G.J. van de Winkel. Human IgG Fc receptors. **Int. Rev. Immunol.** 1997; 16: 29-55.

41. Kobayashi, T., N.A.C. Westerdaal, A. Miyazaki, W.-L. van der Pol, T. Suzuki, H. Yoshie, J.G.J. van de Winkel, and K. Hara. Relevance of immunoglobulin G Fc receptor polymorphism to recurrence of adult periodontitis in Japanese patients. **Infect. Immunity** 1997; 65: 3556-3560.

42. Valerius, T., B. Stockmeyer, A.B. van Spriel, R.F. Graziano, I.E. van den Herik-Oudijk, R. Repp, Y. Deo, J. Lund, J.R. Kalden, M. Gramatzki, and J.G.J. van de Winkel. FcαRI (CD89) as a novel trigger molecule for bispecific antibody therapy. **Blood** 1997; 90: 4485-4492.

43. Reterink, T.J.F., G. van Zandbergen, M. van Egmond, N. Klar-Mohamad, H.C. Morton, J.G.J. van de Winkel, and M.R. Daha. Size-dependent effect of IgA on the IgA Fc receptor (CD89). **Eur. J. Immunol.** 1997; 27: 2219-2224.

44. Van de Winkel, J.G.J., B. Bast, and G.C. de Gast. Immunotherapeutic potential of bispecific antibodies. **Immunol. Today** 1997; 18: 562-564.

45. Gratama, J.W., R. van der Linden, B. van der Holt, R.L.H. Bolhuis, and J.G.J. van de Winkel. Analysis of factors contributing to the formation of mononuclear cell aggregates ('escapees') in flow cytometric immunophenotyping. **Cytometry** 1997; 29: 250-260.

46. Heijnen, I.A.F.M., L.J.M. Rijks, A. Schiel, B. Stockmeyer, H.H. van Ojik, M. Dechant, T. Valerius, T. Keler, A.L. Tutt, M.J. Glennie, E.A. van Royen, P.J.A. Capel, and J.G.J. van de Winkel. Generation of HER-2/neu-specific cytotoxic neutrophils in vivo. **J. Immunol.** 1997; 159: 5629-5639.

47. van Ojik, H.H., R. Repp, G. Groenewegen, T. Valerius, and J.G.J. van de Winkel. Clinical evaluation of the bispecific antibody MDX-H210 (anti-FcγRI x anti-HER-2/neu) in combination with G-CSF (Filgrastim) for treatment of advanced breast cancer. **Cancer Immunol. Immunother.** 1997; 45: 207-209.

48. Heijnen, I.A.F.M., M.J. Glennie, and J.G.J. van de Winkel. Lysis of murine B lymphoma cells by transgenic phagocytes via a human FcγRI x murine class II bispecific antibody. **Cancer Immunol. Immunother.** 1997; 45: 166-170.

49. De Gast, G.C., J.G.J. van de Winkel, and B.J.E.G. Bast. Clinical perspectives of bispecific antibodies in cancer. **Cancer Immunol. Immunother.** 1997; 45: 121-123.

50. Van de Winkel, J.G.J. Afweer & Opkikkers, Oratie, Universiteit Utrecht, Brouwer Uithof, 1997.

51. Verbeek, J.S., W.L.W. Hazenbos, P.J.A. Capel, and J.G.J. van de Winkel. The role of FcR in immunity: lessons from gene targeting in mice. **Res. Immunol.** 1997; 7(148): 466 - 474.

52. Valerius, T., B. Stockmeyer, and J.G.J. van de Winkel. Use of filgrastim (r-metHuG-CSF) to enhance Fc receptor function. In **Filgrastim (R-metHuG-CSF) in Clinical Practice** (G. Morstyn, T.M. Dexter, and MaryAnn Foote, Eds.), Marcel Dekker, Inc., 1998; 73-92.

53. Repp, R.P., G. Helm, and J.G.J. van de Winkel. Use of filgrastim (R-metHuG-CSF) in autoimmune disease. In **Filgrastim (R-metHuG-CSF) in Clinical Practice** (G. Morstyn, T.M. Dexter, and MaryAnn Foote, Eds.), Marcel Dekker, Inc., 1998; 553-573.

54. Van de Winkel, J.G.J., and P.M. Hogarth. **The immunoglobulin receptors and their physiological and pathological roles in immunity**, Kluwer Academic Publishers, Dordrecht, The Netherlands, 1998.

55. Repp, R., and J.G.J. van de Winkel. FcR and autoimmunity. In **The immunoglobulin receptors and their physiological and pathological roles in immunity** (J.G.J. van de Winkel and P.M. Hogarth, Eds.), Kluwer Academic Publishers, Dordrecht, The Netherlands, 1998; 233-248.

56. Morton, H.C., M. van Egmond, and J.G.J. van de Winkel. Human IgA Fc receptors (FcαR). In **The immunoglobulin receptors and their physiological and pathological roles in immunity** (J.G.J. van de Winkel and P.M. Hogarth, Eds.), Kluwer Academic Publishers, Dordrecht, The Netherlands, 1998; 109-118.

57. Hogarth, P.M., and J.G.J. van de Winkel. Fc receptors: historical perspectives and a look to the future. In **The immunoglobulin receptors and their physiological and pathological roles in immunity** (J.G.J. van de Winkel and P.M. Hogarth, Eds.), Kluwer Academic Publishers, Dordrecht, The Netherlands, 1998; 311-313.

58. Van der Pol, W.-L., and J.G.J. van de Winkel. Immunologie in de medische praktijk. X. IgG-receptoren: structuur, functie en immunotherapie. **Ned. Tijds. Geneesk.** 1998; 142: 335-340.

59. Van der Pol, W.-L., E.J. Kuijper, H.R. Koene, M. de Haas, E.A.M. Sanders, and J.G.J. van de Winkel. Immunologie in de medische praktijk. XI. IgG-receptoren: De rol van polymorfismen in autoimmuun- en infectieziekten. **Ned. Tijds. Geneesk.** 1998; 142: 340-345.

60. Manger, K., R. Repp, B.M. Spriewald, A. Rascu, A. Geiger, R. Wassmuth, N.A.C. Westerdaal, B. Wenz, B. Manger, J.R. Kalden, and J.G.J. van de Winkel. FcγRIIa polymorphism in caucasian patients with systemic lupus erythematosus: association with clinical symptoms. **Arthritis Rheum.** 1998; 41:1181-1189.

61. Platonow, A.E., E.J. Kuijper, I.V. Vershinina, G.A. Shipulin, N.A.C. Westerdaal, C.A.P. Fijen, and J.G.J. van de Winkel. Meningococcal disease and polymorphism of FcγRIIa (CD32) in late complement component-deficient individuals. **Clin. Exp. Immunol.** 1998; 111: 97-101.

62. Van der Pol, W.-L., and J.G.J. van de Winkel. IgG receptor polymorphisms: risk factors for disease. **Immunogenetics** 1998; 48: 222-232.

63. Vidarsson, G., and J.G.J. van de Winkel. Fc receptor and complement receptor mediated phagocytosis in host defence. **Curr. Opin. Infect. Dis.** 1998; 11:271-278.

64. Hazenbos, W.L.W., I.A.F.M. Heijnen, D. Meyer, F.M.A. Hofhuis, C.R. de Lavalette, R.E. Schmidt, P.J.A. Capel, J.G.J. van de Winkel, J.E. Gessner, T.K. van den Berg, J.S. Verbeek. Murine IgG1-complexes trigger immune effector functions predominantly via FcγRIII (CD16). **J. Immunol.** 1998; 161:3026-3032.

65. Würflein, D., M. Dechant, B. Stockmeyer, A.L. Tutt, P. Hu, R. Repp, J.R. Kalden, J.G.J. van de Winkel, A.L. Epstein, T. Valerius, M. Glennie, M. Gramatzki. Evaluating antibodies for their capacity to induce cell-mediated lysis of malignant B-cells. **Cancer Res.** 1998; 58:3051-3058.

66. Van Vugt, M.J., I.E. van den Herik-Oudijk, and J.G.J. van de Winkel. FcγRIa/γ-chain complexes trigger ADCC in $CD5^+$ B-cell/macrophage IIA1.6 cells. **Clin. Exp. Immunol.** 1998; 113:415-422.

67. Carlsson, L.E., S. Santoso, G. Baurichter, H. Kroll, S. Papenberg, P. Eichler, N.A.C. Westerdaal, V. Kiefel, J.G.J. van de Winkel, and A. Greinacher. Heparin-induced thrombocytopenia: new insights into the impact of the FcγRIIa-R-H131 polymorphism. **Blood** 1998; 92:1526-1531.

68. Kobayashi, T., W.-L. van der Pol, Kohji Hara, and J.G.J. van de Winkel. IgG Fc Receptor Polymorphisms: Genetic Risk Factors for Periodontal Disease. In **Oral Biology at the turn of the Century** (B. Guggenheim and S. Shapiro, Eds.), Karger, Basel, Switzerland 1998; 151-158.

69. Platonow, A.E., G.A. Shipulin, I.V. Vershinina, J. Dankert, J.G.J. van de Winkel, and E.J. Kuijper. Association of human FcγRIIa (CD32) polymorphism with susceptibility and severity of meningococcal disease. **Clin. Infect. Dis.** 1998; 27:746-750.

70. Van Zandbergen, G., C. van Kooten, N. Klar Mohamad, T.J.F. Reterink, J.W. de Fijter, J.G.J. van de Winkel, and M.R. Daha. Reduced binding of immunoglobulin A (IgA) from patients with primary IgA nephropathy to the myeloid IgA Fc-receptor, CD89. **Nephrol. Dial. Transplant** 1998; 13:3058-3064.

71. Gibbins, J.M., S. Briddon, A. Shutes, M.J. van Vugt, J.G.J. van de Winkel, T. Saito and S.P. Watson. The p85 subunit of phosphatidylinositol 3-kinase associates with the Fc receptor γ-chain and LAT in platelets stimulated by collagen and convulxin. **J. Biol. Chem.** 1998; 273:34437-34443.

72. Van Vugt, M.J., E. Reefman, I. Zeelenberg, G. Boonen, J.H.W. Leusen, and J.G.J. van de Winkel. The alternatively spliced CD64 transcript FcγRIb2 does not specify a surface-expressed isoform. **Eur. J. Immunol.** 1999; 29:143-149.

73. Van Egmond, M., A.J. van Vuuren, H.C. Morton, A.B. van Spriel, L. Shen, F.M.A. Hofhuis, T. Saito, T.N. Mayadas, J.S. Verbeek, and J.G.J. van de Winkel. Human IgA receptor (FcαRI, CD89) function in transgenic mice requires both FcR γ chain and CR3 (CD11b/CD18). **Blood** 1999; 93: 4387-4394.

74. Van Egmond, M., A.J.H. van Vuuren, and J.G.J. van de Winkel. The human Fc receptor for IgA (FcαRI, CD89) on transgenic peritoneal macrophages triggers phagocytosis and tumor cell lysis. **Immunol. Lett.** 1999; 68: 83-87.

75. Van Vuuren, A.J., M. van Egmond, M.J.H. Coenen, H.C. Morton, and J.G.J. van de Winkel. Characterization of the human myeloid IgA Fc receptor I (CD89) gene in a cosmid clone. **Immunogenetics** 1999; 49: 586-589.

76. Rodriguez, M.E., W.-L. van der Pol, L.A.M. Sanders, and J.G.J. van de Winkel. Crucial role of FcγRIIa (CD32) in assessment of functional anti-*S. pneumoniae* antibody activity in human sera. **J. Infect. Dis.** 1999; 179: 423-433.

77. Van Spriel, A.B., I.E. van den Herik-Oudijk, N.M. van Sorge, H.A. Vilé, J.A.G. van Strijp, and J.G.J. van de Winkel. Effective phagocytosis and killing of *Candida albicans* via targeting FcγRI (CD64) or FcαRI (CD89) on neutrophils. **J. Infect. Dis.** 1999; 179: 661-669.

78. Elsässer, D., H. Stadick, S. Stark, J.G.J. van de Winkel, M. Gramatzki, T. Valerius, and W. Schafhauser. Preclinical studies combining bispecific antibodies with cytokine-stimulated effector cells for immunotherapy of renal cell carcinoma. **Anticancer Res.** 1999; 19: 1525-1528.

79. Elsässer, D., H. Stadick, J.G.J. van de Winkel, and T. Valerius. GM-CSF as adjuvant for immunotherapy with bispecific antibodies. **Eur. J. Cancer** 1999; 35: S25-S28.

80. Morton, H.C., G. van Zandbergen, C. van Kooten, C.J. Howard, J.G.J. van de Winkel, and P. Brandtzaeg. Immunoglobulin-binding sites of human FcαRI (CD89) and bovine Fcγ2R are located in their membrane-distal extracellular domains. **J. Exp. Med.** 1999; 189: 1715-1722.

81. Van Vugt, M.J., M.J. Kleijmeer, T. Keler, I. Zeelenberg, M.A. van Dijk, J.H.W. Leusen, H.J. Geuze, and J.G.J. van de Winkel. The FcγRIa (CD64) ligand binding chain triggers major histocompatibility complex class II antigen presentation independently of its associated FcR γ-chain. **Blood** 1999; 94: 808-817.

82. Sugita, N., K. Yamamoto, T. Kobayashi, W.-L. van der Pol, T. Horigome, H. Yoshie, J.G.J. van de Winkel, K. Hara. Relevance of FcγRIIIa-158 V-F polymorphism to recurrence of adult periodontitis in Japanese patients. **Clin. Exp. Immunol.** 1999; 117: 350-354.

83. Dijstelbloem, H.M., R.H.M. Scheepers, W.W. Oost, C.A. Stegeman, W.-L. van der Pol, W.J. Sluiter, C.G.M. Kallenberg, J.G.J. van de Winkel, and J.W. Cohen Tervaert. Fcγ receptor polymorphisms in Wegener's granulomatosis: risk factors for disease relapse. **Arthritis Rheum.** 1999; 42: 1823-1827.

84. Hellwig, S.M.M., W.L.W. Hazenbos, Jan G.J. van de Winkel, and F.R. Mooi. Evidence for an intracellular niche for Bordetella pertussis in broncho-alveolar lavage cells of mice. **FEMS Immunol. Med. Microbiol** 1999; 26: 203-207.

85. Huls, G., I.A.F.M. Heijnen, E. Cuomo, J. van der Linden, E. Boel, J.G.J. van de Winkel, and T. Logtenberg. Anti-tumor immune effector mechanisms recruited by phage display-derived fully human IgG1 and IgA1 monoclonal antibodies. **Cancer Res.** 1999; 59: 5778-5784.

86. Van Zandbergen, G., R. Westerhuis, N.K. Mohamad, J.G.J. van de Winkel, M.R. Daha, and C. van Kooten. Crosslinking of the human Fc receptor for IgA (FcαR/CD89) triggers FcR γ-chain-dependent shedding of soluble CD89. **J. Immunol** 1999; 163: 5806-5812.

87. Thepen, T., A.J. van Vuuren, R.C.M. Kiekens, C.A. Damen, W.C. Vooijs, and J.G.J. van de Winkel. Resolution of cutaneous inflammation after local elimination of macrophages. **Nature Biotech.** 2000; 18: 48-51.

88. Van der Pol, W.-L., L.H. van den Berg, R.H.M. Scheepers, J.G. van der Bom, P.A. van Doorn, R. van Koningsveld, M.C.L. van den Broek, J.H.J. Wokke, and J.G.J. van de Winkel. IgG receptor IIa alleles contribute to susceptibility and severity of the Guillain-Barré syndrome. **Neurology** 2000; 54: 1661-1665.

89. Fijen, C.A., R.G. Bredius, E.J. Kuijper, T.A. Out, M. de Haas, A.P. de Wit, M.R. Daha, and J.G.J. van de Winkel. The role of Fcγ receptor polymorphisms and C3 in the immune defense against Neisseria meningitidis in complement-deficient individuals. **Clin. Exp. Immunol.** 2000; 120: 338-345.

90. Van Lent, P.L.E.M., A.J. van Vuuren, A.B. Blom, A.E.M. Holthuysen, L.B.A. van de Putte, J.G.J. van de Winkel, and W.B. van den Berg. Role of FcR γ chain in inflammation and cartilage damage during experimental antigen-induced arthritis. **Arthritis Rheum.** 2000; 43: 740-752.

91. Van Egmond, M., E. van Garderen, C.A. Damen, E.S. van Amersfoort, G. van Zandbergen, J. van Hattum, J. Kuiper, and J.G.J. van de Winkel. FcαRI-positive liver Kupffer cells: Reappraisal of the function of Immunoglobulin A in immunity. **Nature Med.** 2000; 6: 680-685.

92. Van Spriel, A.B., H.H. van Ojik, and J.G.J. van de Winkel. Immunotherapeutic perspective for bispecific antibodies. **Immunol. Today** 2000; 21: 391-397.

93. Kobayashi, T., W.-L. van der Pol, J.G.J. van de Winkel, K. Hara, N. Sugita, N.A.C. Westerdaal, H. Yoshie, and T. Horigome. Relevance of IgG receptor IIIb (CD16) polymorphism to handling of porphyromonas gingivalis: implications for the pathogenesis of adult periodontitis. **J. Periodontal Res.** 2000; 35: 65-73.

94. Van Vugt, M.J., and J.G.J. van de Winkel; (November 1999); Fc Receptors, in **Embryonic Encyclopedia of Life Sciences**, Nature Publishing Group, London, www.els.net

95. Kiekens, R.C.M., T. Thepen, I.C. Bihari, E.F. Knol, J.G.J. van de Winkel, and C.A.F.M. Bruijnzeel-Koomen. Expression of Fc receptors for IgG during acute and chronic cutaneous inflammation in atopic dermatitis. **Brit. J. Dermatol.** 2000; 142: 1106-1113.

96. Van Spriel, A.B., I.E. van den Herik-Oudijk, and J.G.J. van de Winkel. A single injection of polyethylene-glycol granulocyte colony-stimulating factor strongly prolongs survival of mice with systemic candidiasis. **Cytokine** 2000; 12: 666-670.

97. Kobayashi, T., N. Sugita, W.-L. van der Pol, Y. Nunokawa, N.A.C. Westerdaal, K. Yamamoto, J.G.J. van de Winkel, and H. Yoshie. The Fcγ receptor genotype as a risk factor for generalized early-onset periodontitis in Japanese patients. **J. Periodontol.** 2000; 71: 1425-1432.

98. Van der Pol, W.-L., G. Vidarsson, H. Vilé, J.G.J. van de Winkel, and M.E. Rodiguez. Pneumococcal capsular polysaccharide-specific IgA triggers efficient neutrophil effector functions via FcαRI (CD89). **J. Infect. Dis.** 2000; 182: 1139-1145.

99. Leppers-van de Straat, F.G.J., W.-L. van der Pol, M.D. Jansen, N. Sugita, H. Yoshie, T. Kobayashi, and J.G.J. van de Winkel. A novel PCR-based method for direct Fcγ Receptor IIIa (CD16) allotyping. **J. Immunol. Meth.** 2000; 242: 127-132.

100. Rozendaal, B.A.W.M., A.B. van Spriel, J.G.J. van de Winkel, and H.P. Haagsman. Role of pulmonary surfactant protein D in innate defense against Candida albicans. **J. Infect. Dis.** 2000; 182: 917-922.

101. Honeychurch, J., A.L. Tutt, T. Valerius, I.A.F.M. Heijnen, J.G.J. van de Winkel, and M.J. Glennie. Therapeutic efficacy of FcγRI/CD64-directed bispecific antibodies in B-cell lymphoma. **Blood** 2000; 96: 3544-3552.

102. Stockmeyer, B., M. Dechant, M. van Egmond, A.L. Tutt, K. Sundarapandiyan, R. Graziano, R. Repp, J.R. Kalden, M. Gramatzki, M.J. Glennie, J.G.J. van de Winkel, and T. Valerius. Triggering Fcα-receptor I (CD89) recruits neutrophils as effector cells for CD20-directed antibody therapy. **J. Immunol.** 2000; 165: 5954-5961.

103. Keler, T., P.M. Guyre, L.A. Vitale, K. Sundarapandiyan, J.G.J. van de Winkel, Y.M. Deo, and R.F. Graziano. Targeting weak antigens to CD64 elicits potent humoral responses in human CD64 transgenic mice. **J. Immunol.** 2000; 165: 6738-6742.

104. Dijstelbloem, H.M., M. Bijl, R. Fijnheer, R.H.M. Scheepers, W.W. Oost, M.D. Jansen, W.J. Sluiter, P.C. Limburg, R.H.W.M. Derksen, J.G.J. van de Winkel, and C.G.M. Kallenberg. Fcγ receptor polymorphisms in systemic lupus erythematosus: association with disease and *in vivo* clearance of immune complexes. **Arthritis Rheum.** 2000; 43: 2793-2800.

105. Blom, A.B., P.L. van Lent, A.J. van Vuuren, A.E. Holthuysen, C. Jacobs, L.B. van de Putte, J.G.J. van de Winkel, and W.B. van den Berg. FcγR expression on macrophages is related to severity and chronicity of synovial inflammation and cartilage destruction during experimental immune-complex-mediated arthritis. **Arthritis Res.** 2000; 2: 489-503.

106. Vidarsson, G., J.G.J. van de Winkel, and M.A. van Dijk. Multiplex screening for functionally-rearranged immunoglobulin variable regions reveals expression of hybridoma-specific aberrant V-genes. **J. Immunol. Meth.** 2001; 249: 245-252.

107. Shen, L., M. van Egmond, K. Siemasko, M. Clark, J.G.J. van de Winkel, and W.F. Wade. Presentation of IgA-ovalbumin complexes internalised via the IgA Fc receptor (CD89) is modified by FcR γ chain signaling. **Blood** 2001; 97: 205-213.

108. Hellwig, S.M.M., H.F.L.M. van Oirschot, W.L.W. Hazenbos, A.B. van Spriel, F.R. Mooi, and J.G.J. van de Winkel. Targeting to Fcγ receptors, but not CR3 (CD11b/CD18), increases clearance of *Bordetella pertussis*. **J. Infect. Dis.** 2001; 183: 871-879.

109. Stockmeyer, B., D. Elsasser, M. Dechant, R. Repp, M. Gramatzki, M.J. Glennie, J.G.J. van de Winkel, and T. Valerius. Mechanisms of G-CSF- or GM-CSF-stimulated tumor cell killing by Fc receptor-directed bispecific antibodies. **J. Immunol. Meth.** 2001; 248: 103-111.

110. Van Spriel, A.B., J.H.W. Leusen, M. van Egmond, H.B.P.M. Dijkman, K.J.M. Assmann, T.N. Mayadas, and J.G.J. van de Winkel. Mac-1 (CD11b/CD18) is essential for Fc receptor-mediated neutrophil cytotoxicity and immunological synapse formation. **Blood** 2001; 97: 2478-2486.

111. Saeland, E., A. van Royen, K. Hendriksen, H. Vilé-Weekhout, G.T. Rijkers, L.A.M. Sanders, and J.G.J. van de Winkel. Human C-reactive protein does not bind to FcγRIIa on phagocytic cells. **J. Clin. Invest** 2001; 107: 641-642.

112. Van Egmond, M., C.A. Damen, A.B. van Spriel, G. Vidarsson, E. van Garderen, and J.G.J. van de Winkel. Immunoglobulin A and the IgA Fc receptor. **Trends Immunol.** 2001; 22: 205-211.

113. Zhong, R.K., J.G.J. van de Winkel, T. Thepen, L. Shultz, and E.D. Ball. Cytotoxicity of anti-CD64-ricin a chain immunotoxin (MDX-44) against human acute myeloid leukemia cells in vitro and in SCID mice. **J. Hematother. Stem Cell Res.** 2001; 10: 95-105.

114. Rodriguez, M.E., W.-L. van der Pol, and J.G.J. van de Winkel. Flow cytometry-based phagocytosis assay for sensitive detection of opsonic activity of pneumococcal capsular polysaccharide antibodies in human sera. **J. Immunol. Meth.** 2001; 252: 33-44.

115. Kobayashi, T., K. Yamamoto, N, Sugita, A.B. van Spriel, S. Kaneko, J.G.J. van de Winkel, and H. Yoshie. Effective in vitro clearance of *Porphyromonas gingivalis* by Fcα Receptor I (CD89) on gingival crevicular neutrophils. **Infect. Immun.** 2001; 69: 2935-2942.

116. Yamamoto, K., N. Sugita, T. Kobayashi, K. Okuda, J.G.J. van de Winkel, and H. Yoshie. Evidence for a novel polymorphism affecting both *N*-linked glycosylation and ligand binding of the IgG receptor IIIB (CD16). **Tissue Antigens** 2001: 57: 363-366.

117. Van Dijk, M.A., and J.G.J. van de Winkel. Human antibodies as next generation therapeutics. **Curr. Opin. Chem. Biol.** 2001; 5: 368-374.

118. Van Egmond, M., A.B. van Spriel, H. Vermeulen, G. Huls, E. van Garderen, and J.G.J. van de Winkel. Enhancement of PMN-mediated tumor cell killing upon simultaneous engagement of FcγRI (CD64) and FcαRI (CD89). **Cancer Res.** 2001; 61: 4055-4060.

119. Vidarsson, G., W.-L. van der Pol, J.M.H. van den Elsen, H. Vilé, M. Jansen, J. Duijs, H.C. Morton, E. Boel, M.R. Daha, B. Corthésy, and J.G.J. van de Winkel. Activity of human IgG and IgA subclasses in immune defense against *Neisseria meningitidis* serogroup B. **J. Immunol.** 2001; 166: 6250-6256.

120. Van Spriel, A.B., I.E. van den Herik-Oudijk, and J.G.J. van de Winkel. Cutting Edge: Neutrophil FcγRI as target for immunotherapy of invasive candidiasis. **J. Immunol.** 2001; 166: 7019-7022.

121. Hellwig, S.M.M., A.B. van Spriel, J. Schellekens, F.R. Mooi, and J.G.J. van de Winkel. IgA-mediated protection against *Bordetella pertussis* infection. **Infect. Immun.** 2001; 69: 4846-4850.

122. Sugita, N., T. Kobayashi, Y. Ando, A. Yoshihara, K. Yamamoto, J.G.J van de Winkel, H. Miyazaki, and H. Yoshie. Increased frequency of FcγRIIIb-NA1 allele in periodontitis-resistant subjects in elderly Japanese population. **J. Dental Res.** 2001; 80: 914-918.

123. Teeling, J.L., T. Jansen-Hendriks, T.W. Kuijpers, M. de Haas, J.G.J. van de Winkel, C.E. Hack, W.K. Bleeker. Therapeutic efficacy of intravenous immunoglobulin (IVIG) preparations depends on the IgG dimers: studies in experimental immune thrombocytopenia. **Blood** 2001; 98: 1095-1099.

124. Van Spriel, A.B., and J.G.J. van de Winkel. CD 89 (FcαRI). **J. Biol. Regul. Homeost. Agents** 2001; 15: 179-81.

125. Dijstelbloem, H.M., J.G.J. van de Winkel and C.G.M. Kallenberg. Inflammation in autoimmunity: receptors for IgG revisited. **Trends Immunol.** 2001; 22: 510-516.

126. Kobayashi, T., K. Yamamoto, N. Sugita, W.-L. van der Pol, K. Yasuda, S. Kaneko, J.G.J. van de Winkel, and H. Yoshie. The Fcγ receptor genotype as a severity factor for chronic periodontitis in Japanese patients. **J. Periodont.** 2001; 72: 1324-1331.

127. Van der Pol, W.-L., T.W.J. Huizinga, G. Vidarsson, M.W. van der Linden, M.D. Jansen, V. Keijsers, N.A.C. Westerdaal, J.G.J. van de Winkel, and R.G.J. Westendorp. Relevance of FcγR and IL-10 polymorphisms for meningococcal disease. **J. Infect. Dis.** 2001; 184: 1548-1555.

128. Worth, R.G., L. Mayo-Bond, M.-K. Kim, J.G.J. van de Winkel, R.F. Todd III, H.R. Petty, and A.D. Schreiber. The Cytoplasmic domain of FcγRIIA (CD32) participates in phagolysosome formation. **Blood** 2001; 98: 3429-3434.

129. Hezareh, M., A.J. Hessell, J.G.J. van de Winkel, and P.W.H.I. Parren. The effector function activities of a panel of mutants of a broadly neutralizing antibody against HIV-1. **J. Virol.** 2001; 75: 12161-12168.

130. Rodriguez, M.E., S.M.M. Hellwig, D. Hozbor, J.H.W. Leusen, W.-L. van der Pol and J.G.J. van de Winkel. Fc receptor-mediated immunity against *Bordetella pertussis*. **J. Immunol.** 2001; 167: 6545-6551.

131. Van Spriel, A.B. and J.G.J. van de Winkel. CD89 (FcαRI). **Encyclopedia of Molecular Medicine**, John Wiley & Sons, Inc., 2002; 5: 682-686.

132. Stadick, H., B. Stockmeyer, R. Kühn, K.M. Schrott, J.R. Kalden, M.J. Glennie, J.G.J. van de Winkel, M. Gramatzki, T. Valerius, and D. Elsässer. EGF-R and G250: Useful target antigens for antibody mediated cellular cytotoxicity against renal cell carcinoma? **J. Urol.** 2002; 167: 707-712.

133. Ioan-Facsinay, A., S.J. de Kimpe, S.M.M. Hellwig, P.L. van Lent, F.M.A. Hofhuis, H.H. van Ojik, C. Sedlik, S.A. da Silveira, J. Gerber, Y.F. de Jong, R. Roozendaal, L.A. Aarden, W.B. van den Berg, T. Saito, D. Mosser, S. Amigorena, C. Izui, G-J.B. van Ommen, M. van Vugt, J.G.J. van de Winkel and J.S. Verbeek. FcγRI (CD64) contributes substantially to severity of arthritis, hypersensitivity responses and protection from bacterial infection. **Immunity** 2002; 16: 391-402.

134. Dijstelbloem, H.M., B.G. Hepkema, C.G. Kallenberg, M.W. van der Linden, V. Keijsers, T.W.J. Huizinga, M.D. Jansen, and J.G.J. van de Winkel. The R-H polymorphism of FcγRIIa as a risk factor for systemic lupus erythematosus is independent of single nucleotide polymorphisms in the interleukin-10 gene promotor. **Arthritis Rheum.** 2002; 46: 1125-1126.

135. Manger, K., R. Repp, M. Jansen, M. Geisselbrecht, R. Wassmuth, N.A.C. Westerdaal, A. Pfahlberg, B. Manger, J.R. Kalden, and J.G.J. van de Winkel. Fcgamma receptor IIa, IIIa and IIIb polymorphisms in German patients with systemic lupus erythematosus: association with clinical symptoms. **Ann. Rheum. Dis.** 2002; 61: 786-792.

136. Kyogoku, C., H.M. Dijstelbloem, N. Tsuchiya, Y. Hatta, H. Kato, A. Yamaguchi, T. Fukazawa, M.D. Jansen, H. Hashimoto, J.G.J. van de Winkel, C.G.M. Kallenberg, and K. Tokunaga. Association of Fcγ receptor gene polymorphisms in Japanese patients with systemic lupus erythematosus: Both FcγRIIb and FcγRIIIa primarily contribute to the genetic susceptibility to SLE. **Arthritis Rheum.** 2002; 46: 1242-1254.

137. Spriel, A.B. van, J.H.W. Leusen, H. Vilé, and J.G.J. van de Winkel. Mac-1 (CD11b/CD18) as accessory molecule for FcαR (CD89) binding of IgA. **J. Immunol.** 2002; 169: 3831-3836.

138. Dechant, M., G. Vidarsson, B. Stockmeyer, R. Repp, M.J. Glennie, M. Gramatzki, J.G.J. van de Winkel, and T. Valerius. Chimeric IgA antibodies against HLA class II effectively trigger lymphoma cell killing. **Blood** 2002; 100:4574-4580.

139. Monteiro, R.C., and J.G.J. van de Winkel. IgA Fc receptors. **Annu. Rev. Immunol.** 2003; 21: 177-204.

140. Van Spriel, A.B., H.H. van Ojik, A. Bakker, M.J.H. Jansen, and J.G.J. van de

Winkel. Mac-1 (CD11b/CD18) is crucial for effective Fc receptor-mediated immunity to melanoma. **Blood** 2003; 101:253-258.

141. Stassen, M., F. Meng, E. Melgert, B.M. Machiels, S.-H. Im, S. Fuchs, A.F. Gerritsen, M.A. van Dijk, J.G.J. van de Winkel, and M.H. De Baets. Experimental autoimmune myasthenia gravis in mice expressing human immunoglobulin loci. **J. Neuroimmunol.** 2003; 135: 56-61.

142. Kumpel, B.M., M. de Haas, H.R. Koene, J.G.J. van de Winkel, and M.J. Goodrick. Clearance of red cells by monoclononal IgG3 anti-D *in vivo* is affected by the VF polymorphism of FcγRIIIa (CD 16). **Clin. Exp. Immunol.** 2003; 132: 81-86.

143. Sorge, N.M. van, L.H. van den Berg, K. Geleijns, J.A. van Strijp, B.C. Jacobs, P.A. van Doorn, J.H.J. Wokke, J.G.J. van de Winkel, J.H.W. Leusen, and W.-L. van der Pol. Anti-GM1 IgG antibodies induce leukocyte effector functions via Fcγ receptors. **Ann. Neurol.** 2003; 53: 570-579.

144. Sorge, N.M. van, W-L. Van der Pol, and J.G.J. van de Winkel. FcγR polymorphisms: implications for function, disease susceptibility and immunotherapy. **Tissue Antigens** 2003; 61: 189-202.

145. Glennie, M.J., and J.G.J. van de Winkel. Renaissance of cancer therapeutic antibodies. **Drug Discov. Today** 2003; 8: 503-510.

146. Roon, J. van, A.J. van Vuuren, S. Wijngaarden, K. Jacobs, W.J. Bijlsma, F. P.J.G. Lafeber, T. Thepen, and J.G.J. van de Winkel. Selective eliminimation of synovial inflammatory macrophages in rheumatoid arthritis by an FcγRI-directed immunotoxin. **Arthritis Rheum.** 2003; 48: 1229-1238.

147. Roon, J.A.G., S. Wijngaarden, F.P.J.G. Lafeber, C. Damen, J.G.J. van de Winkel and W.J. Bijlsma. Interleukin 10 treatment of patients with rheumatoid arthritis enhances Fcγ receptor expression on monocytes and responsiveness to immune complex stimulation. **J. Rheumatol.** 2003; 30: 648-651.

148. Wijngaarden, S., J.A.G. van Roon, J.W.J. Bijlsma, J.G.J. van de Winkel, and F.P.J.G. Lafeber. Fcγ receptor expression levels on monocytes are elevated in rheumatoid arthritis patiens with high erythrocyte sedimentation rate who do not use anti-rheumatic drugs. **Rheumatol.** 2003; 42: 681-688.

149. Saeland, E., G. Vidarsson, J.H.W. Leusen, E. van Garderen, M.H. Nahm, H. Vilé-Weekhout, V. Walraven, A.M. Stemerding, J.S. Verbeek, G.T. Rijkers, W. Kuis, E.A.M. Sanders, and J.G.J. van de Winkel. Central role of complement in passive protection by human IgG1 and IgG2 anti-pneumococcal antibodies in mice. **J.**

Immunol. 2003; 170: 6158-6164.

150. Saeland, E., J.H.W. Leusen, G. Vidarsson, W. Kuis, E.A.M. Sanders, I. Jonsdottir, and J.G.J. van de Winkel. Role of Fcγ receptors in vaccine induced immunity to *Streptococcus pneumoniae*. **J. Infect. Dis.** 2003; 187: 1686-1693.

151. Breij, E.C.W., W.-L. van der Pol, L. van Winsen, M.D. Jansen, C.D. Dijkstra, J.G.J. van de Winkel, and B.M.J. Uitdehaag. No association of FcγRIIa, FcγRIIIa and FcγRIIIb polymorphisms with MS. **J. Neuroimmunol.** 2003; 140: 210-215.

152. Arigita, C., L. Bevaart, L.A. Everse, G.A. Koning, W.E. Hennink, D.J.A. Crommelin, J.G.J. van de Winkel, M.J. van Vugt, G.F.A. Kersten, and W. Jiskoot. Liposomal meningococcal B vaccination: role of dendritic cell targeting in the development of a protective immune response. **Infect. Immunity** 2003; 5210-5218.

153. Parren, P.W.H.I., J.H.W. Leusen, and J.G.J. van de Winkel. Antibody-catalyzed water oxidation: state-of-the-art immunity or ancient history? **Trends Immunol.** 2003; 24: 467-471.

154. Ojik, H.H., L. Bevaart, C.E. Dahle, A. Bakker, M.J.H. Jansen, M.J. van Vugt, J.G.J. van de Winkel, and G.J. Weiner. CpG-A and B oligodeoxynucleotides enhance the efficacy of antibody therapy by activating different effector cell populations. **Cancer Res.** 2003; 63: 5595-5600.

155. Villadsen, L.S., J. Schuurman, F. Beurskens, T.N. Dam, F.Dagnaes-Hansen, L. Skov, J. Rygaard, M.M. Voorhorst-Ogink, A.F. Gerritsen, M.A. van Dijk, P.W.H.I. Parren, O. Baadsgaard, and J.G.J. van de Winkel. Resolution of psoriasis upon blockade of interleukin-15 biological activity in a xenograft mouse model. **J. Clin Invest.** 2003; 112: 1571-1580.

156. Loos, B.G., F.G.J. Leppers-Van de Straat, J.G.J. van de Winkel and U. van der Velden. Fcγ receptor polymorphisms in relation to periodontitis. **J. Clin. Periodontol.** 2003; 30: 595-602.

157. Armour, K.L., J.G.J. van de Winkel, L.M. Williamson, and M.R. Clark. Differential binding to human FcγRIIa and FcγRIIb receptors by human IgG wildtype and mutant antibodies. **J. Mol. Immunol.** 2003; 40: 585-593.

158. Pleass, R.J., S.A. Ogun, D.H. McGuinness, J.G.J. van de Winkel, A.A. Holder, and J.M. Woof. Novel anti-malarial antibodies highlight the importance of the antibody Fc region in mediating protection. **Blood** 2003; 102: 4424-4430.

159. Van der Pol, W-L., M.D. Jansen, J.B.M. Kuks, M. de Baets, F.G.J. Leppers-van de Straat, J.H.J. Wokke, J.G.J. van de Winkel, and L.H. van den Berg. Association of the Fcγ receptor IIA-R/R131 genotype with myasthenia gravis in Dutch patients. **J. Neuroimmunol.** 2003; 144: 143-147.

160. Van der Pol, W.-L., M.D. Jansen, W.J. Sluiter, B. van de Sluis, H. Dijstelbloem, F.G.J. Leppers-van de Straat, T. Kobayashi, R.G.J. Westendorp, T.W.J. Huizinga, and J.G.J. van de Winkel. Evidence for non-random distribution of Fcγ receptor genotype combinations. **Immunogenetics** 2003; 55: 240-246.

161. Tur, M.K., M. Huhn, T. Thepen, M. Stöcker, R. Krohn, S. Vogel, E. Jost, R. Osieka, J.G.J. van de Winkel, R. Fischer, R. Finnern, and S. Barth. Recombinant CD64-specific single chain immunotoxin exhibits specific cytotoxicity against acute myeloid leukemia cells. **Cancer Res.** 2003; 63: 8414-8419.

162. Hellwig, S.M.M., M.E. Rodriguez, G.A.M. Berbers, J.G.J. van de Winkel, and F.R. Mooi. Crucial role of antibodies to pertactin in *Bordetella pertussis* immunity. **J. Infect. Dis.** 2003; 188: 738-742.

163. Repp, R., H.H. van Ojik, T. Valerius, G. Groenewegen, G. Wieland, C. Oetzel, B. Stockmeyer, W. Becker, M. Eisenhut, H. Steininger, Y.M. Deo, G.H. Blijham, J.R. Kalden, J.G.J. van de Winkel, and M. Gramatzki. Phase I clinical trial of the bispecific antibody MDX-H210 (anti-FcγRI x anti-HER-2/neu) in combination with Filgrastim (G-CSF) for treatment of advanced breast cancer. **Brit. J. Cancer** 2003; 89: 2234-2243.

164. Kaneko, S., T. Kobayashi, K. Yamamoto, M.D. Jansen, J.G.J. van de Winkel, and H. Yoshie. A novel polymorphism of FcαRI (CD89) associated with aggressive periodontitis. **Tissue Antigens** 2004; 63: 572-577.

165. Tacken, P.J., K.L. Hartshorn, M.R. White, C. van Kooten, J.G.J. van de Winkel, K.B.M. Reid, and J.J. Batenburg. Effective targeting of pathogens to neutrophils via chimeric surfactant protein D/anti-CD89 protein. **J. Immunol.** 2004; 172: 4934-4940.

166. Steeghs, L., J. Tommassen, J.H.W. Leusen, J.G.J. van de Winkel, and P. van der Ley. Teasing apart structural determinants of "toxicity" and "adjuvanticity": Implications for meningococcal vaccine development. **J. Endotox. Res.** 2004; 10: 113-119.

167. Bevaart, L., H.H. van Ojik, A.W. Sun, T.H. Sulahian, J.H.W. Leusen, G.J. Weiner, J.G.J. van de Winkel, and M.J. van Vugt. CpG oligodeoxynucleotides enhance FcγRI-mediated cross presentation by dendritic cells. **Int. Immunol.**

2004; 16: 1091-1098.

168. Beekman, J.M., J. van der Linden, J. Bakema, B. Tops, M. Hinten, M.J. van Vugt, J.G.J. van de Winkel, and J.H.W. Leusen. Modulation of FcγRI (CD64) ligand binding by blocking peptides of periplakin. **J. Biol. Chem.** 2004; 279: 33875-33881.

169. Beekman, J.M., J. Bakema, J.H.W. Leusen, and J.G.J. van de Winkel. Direct interaction between FcγRI (CD64) and periplakin controls receptor endocytosis and ligand binding capacity. **Proc. Natl. Acad. Sci. USA** 2004; 101: 10392-10397.

170. Bleeker, W.K., J.J. Lammerts van Bueren, H.H. van Ojik, A.F. Gerritsen, M. Pluyter, M. Houtkamp, E. Halk, J. Goldstein, J. Schuurman, M.A. van Dijk, J.G.J. van de Winkel, and P.W.H.I. Parren. Dual mode of action of a human anti-epidermal growth factor receptor monoclonal antibody for cancer therapy. **J. Immunol.** 2004; 173: 4699-4707.

171. Bouts, A.H.M., R.T. Krediet, J-C. Davin, L.A.H. Monnens, J. Nauta, C.H. Schroder, J.G.J. van de Winkel, and T.A. Out. IgG and complement receptor expression on peripheral white blood cells in uremic children. **Nephrol. Dial. Transplant.** 2004; 19: 2296-2301.

172. Teeling, J.L., R.R. French, M.S. Cragg, J. van den Brakel, M. Pluyter, H. Huang, C. Chan, P.W.H.I. Parren, C.E. Hack, M. Dechant, T. Valerius, J.G.J. van de Winkel, and M.J. Glennie. Characterisation of new human CD20 monoclonal antibodies with potent cytolytic activity against non-Hodgkin lymphomas. **Blood** 2004; 104: 1793-1800.

173. Kobayashi, T., A. Takauchi, A.B. van Spriel, H.A. Vilé, M. Hayakawa, Y. Shibata, Y. Abiko, J.G.J. van de Winkel, and H. Yoshie. Targeting *Porphyromonas gingivalis* with a bispecific antibody directed to FcαRI (CD89) improves in vitro clearance by gingival crevicular neutrophils. **Vaccine** 2004; 23: 585-594.

174. Van Royen, A., E.A.M. Sanders, S. Wijngaarden, J.A.G. van Roon, M. Voorhorst, V. Walraven, A.F. Gerritsen, M.A. van Dijk, W. Kuis, G.T. Rijkers, T. Keler, J.H.W. Leusen, and J.G.J. van de Winkel. Flow cytometric determination of FcγRIIa (CD32) polymorphism. **J. Immunol. Meth.** 2004; 294: 135-144.

175. Wijngaarden, S., J.G.J. van de Winkel, K. Jacobs, J. Bijlsma, F. Lafeber, and J. van Roon. A shift in the balance of inhibitory and activating Fcγ receptors on monocytes towards the inhibitory FcγRIIb is associated with prevention of monocyte activation in rheumatoid arthritis. **Arthritis Rheum.** 2004; 50: 3878-3887.

176. Van Roon, J.A.G., J.W.J. Bijlsma, J.G.J. van de Winkel, and F.P.J.G. Lafeber. Depletion of synovial macrophages in rheumatoid arthritis by an anti-FcγRI-Calicheamicin immunoconjugate. **Ann. Rheum. Dis.** 2005; 64: 865-870.

177. Leemans, J.C., T. Thepen, S. Weijer, S. Florquin, N. van Rooijen, J.G.J. van de Winkel and T. van der Poll. Macrophages play a dual role during pulmonary tuberculosis in mice. **J. Infect. Dis.** 2005; 191: 65-74.

178. Otten, M.A., E. Rudolph, M. Dechant, C.W. Tuk, R.M. Reijmers, R.H.J. Beelen, J.G.J. van de Winkel, and M. van Egmond. Immature neutrophils mediate tumor cell killing via IgA but not IgG Fc receptors. **J. Immunol.** 2005; 174: 5472-5480.

179. Breij, E.C., P. Heijnen, R, Vloet, T. Saito, J.G.J. van de Winkel, C.D. Dijkstra, S. Amor, and J.S. Verbeek. The FcRγ chain is not essential for induction of experimental allergic encephalomyelitis (EAE) or anti-myelin antibody-mediated exacerbation of EAE. **J. Neuropathol. Exp. Neurol.** 2005; 64: 304-311.

180. Van der Straaten, H.M., R. Fijnheer, H.K. Nieuwenhuis, J.G.J. van de Winkel, and L.F. Verdonck. The FcγRIIa polymorphic site as a potential target for acute graft-versus-host disease in allogeneic stem cell transplantation. **Biol. Blood Marrow Transplant.** 2005; 11: 206-212.

181. Van Sorge, N.M., W.-L. van der Pol, M.D. Jansen, K.P.W. Geleijns, S. Kalmijn, R.A.C. Hughes, J. Pritchard, C.A. Vedeler, K.-M. Myhr, C. Shaw, I.N. van Schaik, J.H.J. Wokke, P.A. van Doorn, B.C. Jacobs, J.G.J. van de Winkel, and L.H. van den Berg. Severity of Guillain-Barré syndrome is associated with FcγRIII polymorphisms. **J. Neuroimmunol.** 2005; 162: 157-164.

182. Wijngaarden, S., J.A. van Roon, J.G.J. van de Winkel, J.W.J. Bijlsma, and F.P.J.G. Lafeber. Down-regulation of activatory Fcγ receptors on monocytes of patients with rheumatoid arthritis upon methotrexate treatment. **Rheumatology** 2005; 44: 729-734.

183. Bouts, A.H.M., J.-C. Davin, R.T. Krediet, C.H. Schrödeer, L.A.M. Monnens, J. Nauta, J.G.J. van de Winkel, and T.A. Out. IgG and complement receptor expression in children treated by peritoneal dialysis. **Pediatric Nephrol.** 2005; 20: 1161-1167.

184. Van Royen, A., E.A.M. Sanders, V. Walraven, M. Voorhorst, E. Saeland, J.L. Teeling, A. Gerritsen, M.A. van dijk, W. Kuis, G.T. Rijkers, L. Vitale, T. Keler, S.E. McKenzie, J.H.W. Leusen, and J.G.J. van de Winkel. Novel human CD32 mAb blocks experimental immune hemolytic anemia in FcγRIIA transgenic mice. **Brit.**

J. Haematol. 2005; 130: 130-137.

185. Baslund, B., N. Tvede, B. Danneskiold-Samsoe, P. Larsson, G. Panayi, J. Petersen, L.J. Petersen, F. Beurskens, J. Schuurman, J.G.J. van de Winkel, P.W.H.I. Parren, J. A. Gracie, S. Jongbloed, F.Y. Liew, and I.B. McInnes. Targeting interleukin-15 in patients with rheumatoid arthritis (RA): a proof-of-concept study. **Arthritis Rheum. 2005**; 52: 2686-2692.

186. Vidarsson, G., N. Overbeeke, A.M. Stemerding, G. van den Dobbelsteen, P. van Ulsen, P. van der Ley, M. Kilian, and J.G.J. van de Winkel. Working mechanism of IgA1-protease: cleavage of IgA1 antibody to PorA of Neisseria meningitidis requires de novo synthesis of IgA1-protease. **Infect. Immunity** 2005; 73: 6721-6726.

187. Steeghs, L., S.J. van Vliet, H. Uronen-Hansson, A. van Mourik, A. Engering, M. Sanchez-Hernandez, N. Klein, R. Callard, J.P.M. van Putten, P. van der Ley, Y. van Kooyk, and J.G.J. van de Winkel. Neisseria meningitidis expressing IgtB lipopolysaccharide targets DC-SIGN and modulates dendritic cell function. **Cell. Microbiol.** 2006; 8: 316-325.

188. Bevaart, L., J. Goldstein, L. Vitale, C. Russoniello, J. Treml, J. Zhang, R.F. Graziano, J.H.W. Leusen, J.G.J. van de Winkel, and T. Keler. Direct targeting of genetically modified tumour cells to FcγRI triggers potent tumor cytotoxicity. **Brit. J. Haematol.** 2006; 132: 317-325.

189. Bevaart, L., M.J.H. Jansen, M.J. van Vugt, J.S. Verbeek, J.H.W. Leusen, and J.G.J. van de Winkel. The high-affinity IgG receptor, FcγRI, plays a central role in antibody therapy of experimental melanoma. **Cancer Res.** 2006; 66: 1261-1264.

190. Bakema, J.E., S. De Haij, C.F. den Hartog-Jager, J. Bakker, G. Vidarsson, M. Van Egmond, J.G.J. van de Winkel, and J.H.W. Leusen. Signaling through mutants of the IgA receptor, CD89, and consequences for FcR γ-chain interaction. **J Immunol.** 2006; 176: 3603-3610.

191. Rodriguez, M.E., S.M.M. Hellwig, M.L.A. Perez Vidakovics, G.A.M. Berbers, and J.G.J. van de Winkel. Bordetella pertussis attachment to respiratory epithelial cells can be impaired by Fimbriae-specific antibodies. **FEMS Immunol. Med. Microbiol.** 2006; 46: 39-47.

192. Van Sorge, N.M., L.H. van den Berg, M.D. Jansen, J.G.J. van de Winkel, and W-L. van der Pol. Infection and Guillain-Barré syndrome. **Infect. Autoimmunity** 2006; in press.

193. Van Vuuren, A.J., J. van Roon, V. Walraven, I. Stuij, M.C. Harmsen, J.G.J. van

de Winkel, and T. Thepen. CD64-directed immunotoxin inhibits arthritis in a novel CD64 transgenic rat model. **J. Immunol.** 2006; in press.

GRANTS

1990	NATO Science-exchange Fellowship via the Netherlands Organization for Scientific Research (NWO)
1993-1994	European Community (Human Capital and Mobility) grant "Molecular characterization of the human IgA Fc receptor"
1993-1997	Medarex Research grant "Role of the human high affinity IgG Fc receptor I (CD64) in antigen presentation"
1994-1996	Wellcome Trust Research Grant "Biological characterization of the human IgA Fc receptor"
1994-1998	Netherlands Organization for Scientific Research (NWO) grant (901-12-174) "Biological implications of human IgG Fc receptor I (CD64) complexity"
1995-1997	Medarex Research grant "Evaluation of CD64-bispecifics for anti-fungal therapy"
1995-1999	Netherlands Organization for Scientific Research (NWO) grant (901-12-214) "Molecular and Functional characterization of human IgA Fc receptors"
1995-1999	Netherlands Organization for Scientific Research (NWO) grant (950-10-624) "Relevance of IgG Fc receptor polymorphism of PMNs for the epidemiology of meningococcal disease"
1996-1997	Utrecht University (Hoofdlijn Infectie en Immuniteit) grant "Immuuntherapie van schimmelinfecties met G-CSF en CD64-bispecifieke antistoffen"
1997	NWO-Japanese Society for the Promotion of Science (JSPS) grant (JB 97-48) "Fc receptor polymorphisms and periodontal disease susceptibility"
1997-1999	EC Training grant (BIO4-97-5084) "Functional dissection of the role of human antibody subclasses in immunity to encapsulated bacterial infections"
1997-2001	Dutch Cancer Foundation (KWF/NKB) grant (UU 97-1517) "G-CSF-mobilized neutrophils as effector cells for immunotherapy in breast carcinoma"
1997-2001	Dutch Kidney Foundation grant (C96.1610) "Fc-receptor polymorfismen bij ge-systematiseerde lupus erythematosus: betekenis voor de klinische expressie van de ziekte"
1997-2001	EC Biotechnology grant (BIO-CT97-2216) "Cellular Vaccines"
1998-2000	Genvlag grant UMC "Immuno-allotypering van Fc receptor polymorfismen bij autoimmuunziekten, infectieziekten en polyneuropathieën"
1998-2000	BTS grant (BTS98110) "Mobilization and modulation of the natural immune system for immunotherapy"
1998-2002	WKZ Sterproject "Mucosale immuniteit en infecties; IgA, Fc receptoren en vaccinatie"
2000-2003	NWO-Technology Foundation STW grant (UFA.5157) "Selective elimination of inflammatory macrophages through immunotoxins: a novel concept in the treatment of rheumatoid arthritis"
2000-2004	National Rheumatism Foundation grant (NR 99-1-402) "Modulation of arthritis and cartilage damage via Fc receptors"
2001-2004	National Rheumatism Foundation grant (00-2-302) "(Pre-)klinisch onderzoek naar het effect van immunotoxinen in de selectieve eliminatie van macrofagen

	bij reumatoide arthritis"
2001-2005	Dutch Cancer Foundation (KWF/NKB) grant (UU 2001-2496) "Development of concepts for induction of potent anti-tumor vaccine responses"
2001-2005	Dutch Cancer Foundation (KWF/NKB) grant (UU 2001-2431) "Human immunoglobulin A receptor (FcαRI, CD89) as target for immunotherapy"
2002-2006	Dutch Cancer Foundation (KWF/NKB) grant (UU 2002-2706) "Mechanisms of cooperation of FcαRI (CD89) and Mac-1 (CD11b/CD18) in tumor cytotoxicity; implications for immunotherapy"
2002-2005	NWO-DFG grant "Chimeric human IgA antibodies for tumor therapy"